Dr. Mark Shelhamer

October 26, 2017
12:00 - 1:00 p.m.
Research Hall, 163
Lunch is provided.


BIOGRAPHY

Dr. Shelhamer is on the faculty of Johns Hopkins where he started as a postdoctoral fellow in 1990. He has bachelor’s and master’s degrees in electrical engineering from Drexel University, and a doctoral degree in Biomedical Engineering from MIT. At MIT he worked on sensorimotor physiology and modeling, including the study of astronaut adaptation to space flight. He then moved to Johns Hopkins where he continued the study of sensorimotor adaptation with an emphasis on the vestibular and oculomotor systems. He has applied nonlinear dynamical analysis to the control of eye movements, including investigations of the functional implications of fractal activity in physiological behavior. In parallel with these activities, he has had support from NASA to study various aspects of sensorimotor adaptation to space flight, amassing a fair amount of parabolic flight (“weightless”) experience in the process. He also serves as an advisor to the commercial spaceflight industry on the research potential of suborbital space flight. Dr. Shelhamer is the author of Nonlinear Dynamics in Physiology: A State-Space Approach, has published over 70 scientific papers, and has had research support from NIH, NSF, NASA, NSBRI, and the Whitaker Foundation. From 2013 to 2016 he was on leave from his academic position to serve as Chief Scientist for the NASA Human Research Program at the Johnson Space Center. In this role, he oversaw NASA’s research portfolio to maintain human health and performance in long-duration space flights.